CHART 5

# Motor Vehicles, Model Year 1982

Model year 1982 was the third consecutive depressed year for the motor vehicle industry. Sales of new motor vehicles totaled 10.1 million, down from 11.3 million in 1981 and 11.9 million in 1980. In 1977-79, motor vehicle sales had averaged about 15.0 million (chart 5). Car sales in 1982 dropped to their lowest level in two decades, and truck sales moved up slightly but were still about 40 percent below their peak levels. The 1982 weakness in motor vehicle sales reflected a deterioration in economic and financial conditions.

The drop in new car sales was largely accounted for by domestic cars, but imported car sales also were down. The market share of large domestic cars increased, and the import share reached a new high.

The small increase in new truck sales was in domestic light trucks. Sales of these trucks were boosted by the introduction of compact pickup trucks in model year 1982. Sales of "other" domestic trucks and imported trucks declined.

#### **New Cars**

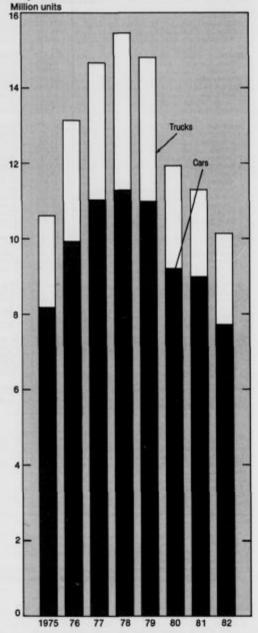
Retail sales of new passenger cars totaled only 7.7 million in the 1982 model year. The low level was another step down from already weak sales—about 9.0 million—in 1980 and 1981. In 1977-79, new car sales had averaged about 11.0 million. The further drop in sales in 1982 may be attributed to the worsening of the economic and financial conditions that had contributed to the weakness in 1980 and 1981. (See "Motor Vehicles, Model Year 1981" in the Survey of Current Business, October 1981.) The increase in disposable personal

income over model year 1982 decelerated from the increase in 1981. Concern about job security and income losses intensified as the unemployment rate rose from 7.4 percent in the third quarter of 1981 to a postwar record 9.9 percent in the third quarter of 1982. Also, monetized capital gains on existing residences, which could be used to support consumer purchases, were down again in 1982 due to a pronounced slowing in housing prices and to a continued low volume of sales.

Unfavorable financial conditions—about three-fourths of new car purchases are made on credit—continued to be a constraint on sales in 1982. High interest charges on auto loans in combination with rising new car prices may have pushed monthly payments beyond the reach of some buyers. Moreover, it is likely that the high interest rates had a psychological impact: Prospective buyers were unwilling to take out loans at such rates.

Interest rates on new auto installment loans reached record levels during the 1982 model year. The rate charged by commercial banks surpassed 17 percent in the fourth quarter of 1981 and remained above that level throughout the year (chart 6). Interest rates on auto loans by finance companies, which are dominated by the automakers' financial subsidiaries, also were up in 1982. Prior to 1980, the rates charged by these companies had exceeded those by commercial banks by about 1-2 percentage points, but the gap narrowed when the automakers' subsidiaries held down rate increases to support new car sales. The second-quarter drop in the rate charged by finance companies was due to a special discount rate of 12.8 percent on new car sales by a major subsidiary.

## Motor Vehicle Sales by Model Year



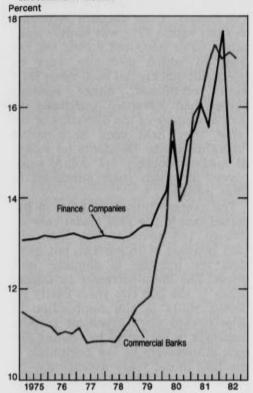
Note:—October through September sales for each model year.

Data: Motor Vehicle Manufacturers Association of the United States, Inc. and Ward's Automotive Records.

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CHART 6

### Interest Rates on New Auto Installment Loans



Note. --Most common interest rates (annual percentage rate) al reporting institutions.

Data: Federal Reserve Board.

U.S. Department of Commerce, Bureau of Economic Analysis

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In addition, large increases in the prices of new cars continued in the 1982 model year. For the year as a whole, the average unit sales price of a new car was about \$9,500, up 13 percent from 1981. In 1981, the unit price had increased 15 percent.1 Prospective buyers may have been turned away by "sticker shock": Faced with the huge jump in prices since their last new car purchase, they may have decided to hold on to existing cars. Recent increases in the average age of cars in use and reductions in the scrappage of old cars support this view.

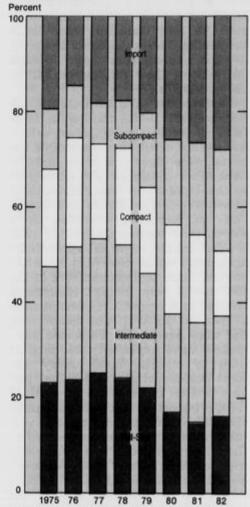
#### Domestic and import sales

Most of the decline in new car sales in model year 1982 was in domestic sales, which fell to 5.5 million from 6.6 million in 1981. Sales of full-size cars declined from 1.3 to 1.2 million, and intermediate car sales fell from 1.9 to 1.6 million. The full-size car share of total sales rose to 16 percent from a record low 15 percent in 1981, and the intermediate car share remained steady at 21 percent (chart 7). The increase in the share of total sales accounted for by these large domestic cars reversed a 4-year downtrend.

Several factors may have contributed to the relative improvement in sales of large domestic cars in 1982. It may reflect a lessening in the importance of fuel economy as a factor in new car buying. From the third quarter of 1981 to the third quarter of 1982, gasoline prices declined 4½ percent, compared with increases of 9 percent and 28% percent over the 2 previous model years. Also, the fullsize car category includes all of the luxury models; purchasers of these cars tend to be more affluent and less affected by poor economic conditions. Finally, over the past few years, the price differential between cars in the various size categories has narrowed considerably. In 1982, a full-size or intermediate car with standard equipment could be purchased for close to the same price as a compact or subcompact car equipped with similar options.

Sales of compact cars dropped sharply from 1.7 million in 1981 to 1.1 million in 1982, and subcompact car sales declined from 1.7 to 1.6 million. The sharp drop in compact sales was partly due to the introduction in midyear of smaller versions of two popular models; these models were reclassified from the compact category to the subcompact category. Without the reclassification, the declines in compact and subcompact sales would have been about equal. The share of total sales accounted for by these small domestic cars fell from 37 ½ percent in 1981 to 35 percent, the first decline since the 1977 model year. The decline probably reflected some dissatisfaction with the quality and pricing of the current crop of small domestic cars.

# Market Share of New Car Sales by Model Year



Note.—Based on October through September sales for each model year.

Data: Motor Vehicle Manufacturers Association of the United States, Inc. and Ward's Automotive Reports.

U.S. Department of Commerce, Bureau of Economic Analysis

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It is unlikely that the shift in the composition of domestic sales toward larger cars initiated a return to the size distribution of a decade ago when large cars dominated the market. Over the last decade, consumer preferences in car size have been altered by such factors as shrinking family size and concern about price and availability of gasoline. Several plants have been converted to the production of small cars in the past few years, and plans call for further increases in small-car capacity. Also, automakers must meet federally mandated standards for Corporate Average Fuel Economy (CAFE). The CAFE is based on the average miles per gallon (mpg) ratings for each model, weighted by

<sup>1.</sup> BEA's average unit sales price is derived using the average retail price of each model adjusted for options, reduced to transaction prices by removing dealer discounts or premiums, adjusted for sales taxes, and weighted by the sales mix. Movements in it differ from movements in the new autos component of the Consumer Price Index (CPI) primarily because the BEA measure does not contain adjustments for quality change and also because it reflects changes in the mix of cars sold. The CPI measure increased 5 percent in the 1982 model year and 6½ percent in 1981.

the number produced. The standard for 1982 was 24.0 mpg, and it will be up to 27.5 mpg by 1985. Due to the shift in the sales composition toward larger cars, some automakers barely met the 1982 standard, after easily surpassing the standards for the prior 2 years. Automakers plan to phase out most of their full-size models by the mid-1980's.

Imported car sales fell from 2.4 million in 1981 to 2.2 million in 1982. Sales of imports from Japan, which account for about 80 percent of all imports, were down, as were imports from other countries. The agreement by the Japanese to limit shipments of cars to the United States to 1.68 million per year was extended for a second year beginning April 1, 1982. If sales had picked up as expected, the agreement would have held down the market share of Japanese cars in the 1982 model year. Instead, their share climbed to a record 22½ percent from 21 percent in 1981. Coincident with the auto agreement, Japanese automakers have expanded their product lines to include more luxury and sport models, which yield higher perunit profits. In an effort to ward off future import restrictions, Japanese automakers are considering joint ventures with U.S. companies as well as the opening of production facilities in this country. The first Japaneseowned car plant is scheduled to start production in November of this year; sales of these cars will be considered domestic sales.

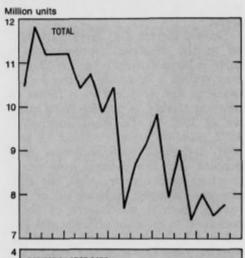
#### New car prices

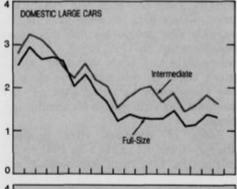
The average unit sales price of a domestic car was up substantially-12 percent-in the 1982 model year, but less than the 1981 model year increase of 14 percent. At the beginning of the year, list prices of domestic cars were raised an average of 31/2-51/2 percent from 1981 yearend prices. Price increases in the course of the 1982 model year were smaller than the intermittent increases during the previous few years and were limited to specific models, optional equipment, and delivery fees.

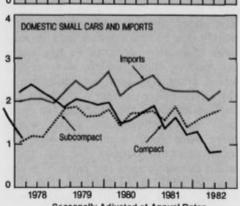
The use of discount programs by domestic automakers to boost sales was widespread and occurred in every quarter of the model year. In the

fourth quarter of 1981, discount programs involving cash rebates (\$400-\$700) and interest rate subsidies (a 13.8-percent rate) were available on selected small cars. During much of the first quarter of 1982, rebates ranging from \$500 to \$750 on most models, and up to \$2,000 on some luxury models, were offered. In the second quarter, discounts were largely in the form of interest rate subsidies (a 12.8-

### CHART 8 Retail Sales of New Passenger Cars







Seasonally Adjusted at Annual Rates -The components may not add to the total because each category was separately adjusted for seasonal variation. Data to the most recent quarter are projected.

Data: Motor Vehicle Manufacturers Association of the United States.

U.S. Department of Commerce, Bureau of Economic Analysis

percent rate) and extended warranties (up to 5 years), and, in the third quarter, of incentives to dealers that were at least in part passed on to buyers. The impact of the discount programs on sales within 1982 was largely transitory. Sales improved during the periods in which discounts were in effect, but quickly fell back when they were terminated. either because buyers had advanced purchases to take advantage of the discounts or because they held back anticipating future discounts. Discounts on selected models probably did induce some buyers to switch their purchases to those models.

The average unit sales price of imported cars in the 1982 model year increased 14½ percent, less than the 1981 increase of 18 percent, but more than the increase in domestic unit prices. The large increases in import prices in the last two years partly reflected shifts in the composition of sales toward more expensive models. Increases in list prices by leading foreign automakers at the beginning of the 1982 model year-averaging 5-7% percent-were somewhat larger than those on domestic cars. Price increases in the course of the model year were minimal, and some dealer discounting in response to domestic programs was apparent.

Price increases on the new 1983 models have been quite modest in comparison with recent years. Announced increases in the list prices of 1983 domestic models were in the range of 1-2 percent. Announced increases in 1983 list prices by leading foreign manufacturers ranged from 1½-3½ percent.

#### Quarterly patterns

On a quarterly basis, domestic new car sales were 5.2 million (seasonally adjusted annual rate) in the fourth quarter of 1981, increased to 5.8 million in the first quarter of 1982, and fell back to 5.5 million in the second and third quarters. Domestic production had weakened to 5.0 million (seasonally adjusted annual rate) in the fourth quarter of 1981, as sales slumped to recession levels. Inventories of new cars were unchanged at about 1,500,000 (seasonally adjusted), but the inventory-sales (I/S) ratio moved up to 3.5, substantially above the 2.0 ratio considered desirable by the industry.

To reduce the inventory overhang, extensive cash rebates were offered to stimulate sales in the first quarter of 1982, and production was slashed to a mere 4.2 million. The number of hourly workers on indefinite layoff, which had moved above 200,000 during the fourth quarter of 1981, peaked at 253,500 in the first quarter of 1982. Inventories were cut back sharply to 1,170,000, the lowest level in more than a year, and the I/S ratio dropped to 2.4 in the first quarter.

Various discount programs during the first 2 months of the second quarter of 1982 maintained sales at about the same level as in the first, and quarterly production was stepped up to 5.4 million to keep inventories in balance. After the programs were discontinued near the end of the quarter, sales plummeted; inventories edged up to 1,250,000 and the I/S ratio to 2.7. Sales were expected to pick up in the third quarter due to a cut in personal income taxes, an improvement in economic conditions, and a drop in interest rates.

Except for a slight dip to 2.0 million in the second quarter, imported car sales were steady at 2.2 million throughout the model year. Second-quarter sales may have been held down by low supplies of Japanese cars: Shipments to the United States had been reduced to comply with the provisions of the auto agreement.

#### Recent developments and outlook

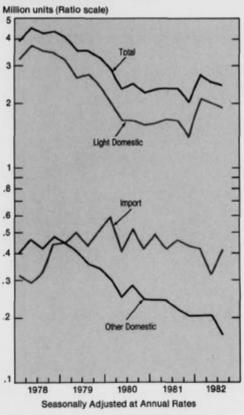
The expected third-quarter increase in new car sales did not materialize. Total sales were up only slightly-to 7.8 million from 7.5 million in the second quarter (chart 8). The increase was almost entirely in import sales, which bounced back to 2.2 million from 2.0 million. Domestic sales were unchanged: An increase in small car sales was offset by a decline in sales of large cars. Despite the tax cut, consumers apparently remained cautious about economic prospects. Also, the downturn in auto installment rates was slow. The rate charged by commercial banks in the third quarter was only 12 basis points below the record second-quarter rate of 17.2 percent.

Due to a strong first 2 months, domestic car production was up to 6.1 million in the third quarter. Production was cut back sharply in September by extending the downtime for model changeover and by slowing the production lines of 1983 models. The number of hourly workers on indefinite layoff was 232,000 at the end of the third quarter, about the same as at the end of the second. Due to the lower than expected sales, inventories built up rapidly to 1,463,000 in the third quarter, and the I/S ratio jumped to 3.3. Large inventories of 1982 models remained on dealers' lots at the close of the model year.

Production is scheduled to drop sharply to about 5.0 million in the fourth quarter, indicating that automakers do not expect a big upturn in sales in the near future. If sales in the fourth quarter are no lower than in the third, a sizable liquidation in inventories will take place.

CHART 9

## Retail Sales of New Trucks



Note.—Retail sales of domestic new trucks are classified by gross vehicle weight as light—up to 10,000 pounds, and other—over 10,000 pounds, import trucks include imports by U.S. manufacturers. Data: Motor Vehicle Manufacturers Association of the United States.

U.S. Department of Commerce, Bureau of Economic Analysis

inc. and Ward's Automotive Reports

#### New Trucks

Retail sales of new trucks totaled 2.4 million in the 1982 model year, up slightly from 2.3 million in 1981. Sales of domestic light trucks increased, and sales of domestic "other" trucks and imported trucks declined. The quarterly pattern of new truck sales paralleled that of new cars. Sales were at a 10-year low of 2.0 million in the fourth quarter of 1981, jumped to 2.7 million in the first quarter of 1982, and steadied at 2.5 million in the second and third quarters (chart 9).

Sales of domestic light trucks (up to 10,000 pounds) increased to 1.8 million from 1.6 million in 1981. The increase was the first since 1978; sales remained substantially below that year's peak of 3.4 million. Most light trucks are pickups and vans, more than one-half of which are purchased by consumers for personal use. These purchases were affected by the same unfavorable economic and financial conditions that dampened new car sales. Domestic light truck sales were boosted in 1982 by the introduction of new compact pickups, which competed directly with imported pickups from Japan. The new pickups obtain fuel economy comparable to that of the Japanese pickups, but are slightly larger and have greater load-carrying capacities. Beginning in the first quarter of 1982, domestic manufacturers extended the cash rebate and other sales incentive programs to include light trucks.

Sales of imported trucks declined from 0.45 million in 1981 to 0.39 million in 1982, and their share of total light truck sales fell from a record 21½ percent to 17½ percent. Nearly all imported trucks are compact pickups produced in Japan. The decline in imports in 1982 can be attributed entirely to "captive" imports, that is, trucks produced in Japan and imported by U.S. manufacturers for sale through U.S. dealerships. Imports of these pickups were cut back when the domestic compact pickups were introduced.

Sales of "noncaptive" Japanese pickups were about the same in the 1982 model year as in 1981. Shipments of these vehicles were not limited by the auto agreement, but strong competition from the new domestic pickups held down sales. Some price discounting in response to the domestic manufacturers' programs was evident in the first half of the model year. In June, Japanese manufacturers cut the prices on some models by about 4–5 percent to alleviate a buildup of inventories. The first Japanese-owned truck plant to be located in this country is scheduled to start production in the summer of 1983; sales of these trucks will be considered domestic sales.

Sales of "other" domestic trucks (over 10,000 pounds) fell to 0.19 million in 1982—the lowest level in two decades—from 0.24 million in 1981. This broad category consists of

medium-duty trucks, mostly general delivery trucks and buses, and heavy-duty trucks, mainly large van trucks and diesel tractors designed to pull trailers. The low level of sales in 1982 reflected the poor economic conditions, high interest rates, and weak profits—all of which deterred business investment.

Domestic truck production increased to 2.2 million in 1982 from 1.9 million in 1981, but was considerably below the 3.6-million levels of the late 1970's. The increase was in light trucks; production of "other" trucks slumped for the third consecutive year. Production of light trucks was weak in the fourth quarter of 1981; inventories were high relative to the

low level of sales. Price discounting and the increased availability of compact pickups boosted sales in the first quarter of 1982, and inventories fell sharply. As the first quarter progressed, production was stepped up. Production was stepped up again in the second quarter. Sales fell off, however, and inventories accumulated. In the third quarter, production was maintained at about the second-quarter level. It was expected that sales would pick up, but they also remained about the same as in the second quarter. Consequently, inventories accumulated further. Nevertheless, production schedules for the fourth quarter indicate a moderate increase over the third.